



Complete Summary

TITLE

Healthcare-associated MRSA: percentage of intensive care unit (ICU)-associated new methicillin-resistant *Staphylococcus aureus* (MRSA) healthcare-associated infections in a sterile site, during the 6 month time period.

SOURCE(S)

Australian Council on Healthcare Standards (ACHS). ACHS clinical indicator users' manual 2009. ULTIMO NSW: Australian Council on Healthcare Standards (ACHS); 2009 Jan. 853 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of intensive care unit (ICU)-associated new methicillin-resistant *Staphylococcus aureus* (MRSA) healthcare-associated infections in a sterile site, during the 6 month time period.

RATIONALE

Methicillin-resistant *Staphylococcus aureus* (MRSA) can colonise or cause invasive infections during the healthcare process and spread amongst patients.

The majority of this is spread through contact transmission, predominantly by hand transfer. Healthcare-associated inpatient MRSA morbidity is a good proxy indicator for compliance of healthcare workers with hand hygiene requirements

and asepsis during procedures requiring invasive techniques (e.g., insertion of intravenous devices, surgery).

PRIMARY CLINICAL COMPONENT

Methicillin-resistant *Staphylococcus aureus* (MRSA); intensive care unit (ICU)-associated infections; sterile site

DENOMINATOR DESCRIPTION

Total number of intensive care unit (ICU) overnight occupied bed days (OBDs), during the 6 month time period (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Total number of intensive care unit (ICU)-associated new methicillin-resistant *Staphylococcus aureus* (MRSA) healthcare-associated infections in a sterile site, during the 6 month time period (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Australian Council on Healthcare Standards (ACHS). Australasian clinical indicator report 2001-2007. Determining the potential to improve quality of care: 9th edition. ULTIMO NSW: Australian Council on Healthcare Standards (ACHS); 2008. 611 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

All ages

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Safety

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Intensive care unit (ICU) overnight occupied bed days (OBDs), during the 6 month time period

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Total number of intensive care unit (ICU) overnight occupied bed days (OBDs), during the 6 month time period

Notes:

- ICU includes adult, paediatric and neonatal intensive care units.
- OBDs are the total number of days for all patients who were admitted for an episode of care (where applicable only 'qualified' baby-days are counted with the total OBD figure).

Exclusions

Same day admissions are excluded.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Institutionalization

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Total number of intensive care unit (ICU)-associated new methicillin-resistant *Staphylococcus aureus* (MRSA) healthcare-associated infections in a sterile site, during the 6 month time period

Notes:

- *Sterile site isolate* refers to a significant isolate obtained from bloodstream, normally sterile body cavity (peritoneum, pleural or pericardial space, cerebrospinal fluid) or tissue sample collected by aseptic means.
- *Infection* refers to events associated with a sterile isolate or an event associated with a non-sterile site clinical isolate where multi-resistant organism (MRO)-specific antibiotic therapy was administered by clinician (e.g., for MRSA vancomycin or fusidate/rifampicin).
- *New infections* refer to the number of patients who develop healthcare-associated infections (i.e., become 'infected') during the period of surveillance. Previously colonised patients who develop an infection are counted as events. Only the first infection event for an admission is counted.

Refer to Appendix 2 in the original measure documentation for International Classification of Diseases, Tenth Revision, Australian Modification (ICD-10-AM) diagnosis code of methicillin-resistant agent.

Exclusions

Patients that are given empirical therapy for an MRO infection on the basis of clinical suspicion and no other evidence including positive screening swabs should not be included.

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Institutionalization

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Adverse Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a lower score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties**EXTENT OF MEASURE TESTING**

Unspecified

Identifying Information**ORIGINAL TITLE**

Indicator area 5: healthcare-associated methicillin-resistant staphylococcus aureus (MRSA) morbidity CI 5.1.

MEASURE COLLECTION

[Australian Council on Healthcare Standards \(ACHS\) Equip Clinical Indicators](#)

MEASURE SET NAME

[Infection Control Indicators](#)

DEVELOPER

Australian Council on Healthcare Standards

FUNDING SOURCE(S)

Funding is direct Australian Council on Healthcare Standards (ACHS) funding sourced through our membership. ACHS does not receive external funding from the government or other sources.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Our terms of reference dictate the composition of the working parties that develop our indicators and include the following:

- Two Clinicians -- nominated by the relevant specialty college/association/society, one nominated to be the chair of the working party
- Private Hospital Representative -- nominated by the Australian Private Hospital Association
- Consumer Representative -- nominated by the Consumer Health Forum of Australia
- Coding Representative -- nominated by the National Centre for Clinical classification on Health
- Quality Health New Zealand, nominated by QHNZ (if applicable)
- Epidemiological/Clinical Research Representative, Director of Health Services Research Group, University of Newcastle
- Australian Council on Healthcare Standards (ACHS) Representatives -- Clinical Director, Coordinator, Administrative Assistant
- Other Expert Stakeholders, as required

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

None

ADAPTATION

This indicator is derived from the Primary Multi-Resistant Organism (MRO) Morbidity indicator that has been recommended by the Australian Council for Safety and Quality in Health Care.

RELEASE DATE

2002 Jan

REVISION DATE

2009 Jan

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Australian Council on Healthcare Standards (ACHS). ACHS clinical indicator users' manual 2008. ULTIMO NSW: Australian Council on Healthcare Standards (ACHS); 2007 Dec. 776 p.

SOURCE(S)

Australian Council on Healthcare Standards (ACHS). ACHS clinical indicator users' manual 2009. ULTIMO NSW: Australian Council on Healthcare Standards (ACHS); 2009 Jan. 853 p.

MEASURE AVAILABILITY

The individual measure, "Indicator Area 5: Healthcare-Associated Methicillin-Resistant Staphylococcus Aureus (MRSA) Morbidity CI 5.1," is published in "ACHS Clinical Indicator Users' Manual 2009."

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COMPANION DOCUMENTS

The following is available:

- Australian Council on Healthcare Standards (ACHS). Australasian clinical indicator report 2001-2007. Determining the potential to improve quality of care: 9th edition. ULTIMO NSW: Australian Council on Healthcare Standards (ACHS); 2008. 611 p. This document is available in Portable Document Format (PDF) from the [Australian Council on Healthcare Standards \(ACHS\) Web site](http://www.achs.org.au).

NQMC STATUS

This NQMC summary was completed by ECRI Institute on August 14, 2008. This NQMC summary was updated by ECRI Institute on October 9, 2009.

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